

What is claimed is:

- 1 1. A method, comprising:
2 receiving data relating to a database system;
3 receiving, from the device, information associated with at least one
4 characteristic of the data;
5 partitioning the data for storage in a database system having plural data
6 storage units based on the characteristic associated with the data; and
7 storing the partitioned data in one or more storage units of the database
8 system.
- 1 2. The method of claim 1, wherein receiving the information comprises
2 receiving the information from a client system, the device comprising the client system.
- 1 3. The method of claim 1, wherein receiving the information comprises
2 receiving at least one of an average value of the data, a uniform distribution of the data, a
3 minimum value of the data, and a maximum value of the data.
- 1 4. The method of claim 3, wherein partitioning the data comprises defining
2 straight-line segments based on at least one of the average value of the data, the uniform
3 distribution of the data, the minimum value of the data, and the maximum value of the
4 data.
- 1 5. The method of claim 4, wherein partitioning the data further comprises
2 defining breakpoints to provide the straight-line segments.
- 1 6. The method of claim 1, wherein partitioning the data for storage in the
2 database system comprises dividing the data into segments containing related data.

1 7. The method of claim 1, wherein partitioning the data comprises organizing
2 the data into related portions.

1 8. The method of claim 7, wherein partitioning the data further comprises
2 executing an algorithm to organize the data.

1 9. The method of claim 1, wherein storing the partitioned data in the database
2 system comprises storing the partitioned data in a relational database system.

1 10. The method of claim 1, further comprising storing the partitioned data
2 under the supervision of a limited number of data servers relating to the database system.

1 11. An apparatus, comprising:
2 a database;
3 a network interface;
4 a database controller coupled to the database, wherein the database
5 controller is adapted to receive partitioning information and perform a partitioning task
6 on data received through the network interface based on the partitioning information,
7 the database controller adapted to further store the data that is partitioned
8 by the partitioning task, the partitioning task to identify one or more portions of the
9 database in which each segment of the partitioned data is stored.

1 12. The system of claim 11, wherein the database is a parallel database system.

1 13. The system of claim 11, wherein the database is a relational database.

1 14. The system of claim 11, wherein the database controller comprises:
2 a query coordinator coupled to the network interface, the query coordinator
3 to receive query requests from the network interface;
4 a partitioner to partition data and perform at least one of storing and
5 locating partitioned data in the database in response to the query requests; and
6 a partitioner data storage coupled to the partitioner, the partitioner data
7 storage to store information associated with at least one characteristic of the data to
8 enable the partitioner to partition data.

1 15. The system of claim 14, wherein the partitioner is capable of executing an
2 algorithm, based on the stored information, for partitioning the data.

1 16. The system of claim 15, further comprising a plurality of data servers to
2 store and access partitioned data in the database.

1 17. The system of claim 11, further comprising a client system, wherein the
2 client system sends data to the database through the network interface.

1 18. The system of claim 17, wherein the client system sends at least one
2 characteristic of the data to be used by the database controller to partition the data.

1 19. An article comprising one or more storage media containing instructions
2 that when executed cause a device to:
3 receive information associated with at least one characteristic of data to be
4 stored into a database from a remote device;
5 partition the data for storage in a database system based on the
6 characteristic of the data; and
7 store the partitioned data in the database system.

1 20. The article of claim 19, wherein the instructions when executed cause the
2 device to execute an algorithm to partition the data.

1 21. The article of claim 19, wherein the instructions when executed cause the
2 device to divide the data into segments containing related data.